

## **REMARKS**

In the Office Action mailed December 21, 2004, the examiner rejected applicants' claims 1-20 for alleged obviousness under 35 USC 103, with primary reliance upon an asserted combination of Woodward, U.S. Patent 2,859,784 and Galland, U.S. Patent 4,391,172. The rejections were made final.

In response, applicants again respectfully resubmit claims 1-20 without revision, for reconsideration and allowance, particularly for the reasons noted in the following remarks. In this regard, applicants respectfully contend that the examiner has misconstrued and misapplied the cited references for purposes of constructing the obviousness rejections of applicants' claims.

### **Brief Discussion of the Invention as Claimed**

Applicants' invention as claimed is directed to a plug prevention device in a rotary slicing machine of the type having a rotary impeller defining a rotating "throat wall" that is upwardly open. The plug prevention device comprises a member such as an elongated rod "extending at least partially into" (claims 1 and 10, emphasis added), or "disposed generally within" (claim 12, emphasis added) this rotating inlet throat and disposed "substantially off-axis" (emphasis added) relative to an axis of impeller rotation. The key aspect of applicants' invention is that the "plug prevention" device is positioned so that it will be struck by and therefore dislodge any food product that becomes stuck by centrifugal action against the rotating throat wall of the spinning impeller.

In the prior Office Action, the examiner characterized the supply chute 11 in the cited Woodward reference as a plug prevention device capable of performing this function. The examiner has repeated this characterization in the current Office Action.

Simply stated, Woodward's supply chute 11 does not and cannot perform this function. Specifically, Woodward's supply chute 11, even if used in a reconfigured machine defining an upwardly open and rotating throat wall, does not and cannot dislodge a food product that has become stuck or trapped by centrifugal action against the rotating throat wall of the spinning impeller.

Accordingly, and as will be delineated in more detail herein, applicants respectfully assert that the Woodward reference cannot be combined with any other reference of record to support a rejection of applicants' claims. Claims 1-20 are, therefore, resubmitted without revision for reconsideration and allowance.

### **Discussion of the Cited References**

The Woodward reference (U.S. Patent 2,859,784) discloses a rotary slicing machine having an off-axis supply chute 11 for delivering potatoes into the interior of a housing wherein a rotary impeller sweeps the potatoes into cutting engagement with peripherally mounted cutting knives. The examiner agrees that Woodward's machine does not define an "upwardly open" inlet throat for his rotary impeller (Office Action, p. 2, para. 2), but contends that a person skilled in the art would find it obvious in view of the Galland reference (U.S. Patent 4,391,172) to re-orient Woodward's machine to provide an "upwardly open" impeller inlet throat (Office Action, p. 3, lines 1-3).

The examiner argues that Woodward's supply chute 11 constitutes a "plug prevention member since it allows only a certain number of potatoes" to enter the impeller for cutting (Office Action, p. 2, para. 2). Applicants contend that the examiner is missing the point, namely, that applicants' "plug prevention" device as claimed functions by striking and dislodging potatoes that become stuck or trapped by centrifugal action against the rotating throat wall of the spinning impeller. Woodward's supply chute 11 does not and cannot function in this manner.

More particularly, in Woodward, the downstream edge of the supply chute 11 terminates short of the upstream-most plane of the rotating impeller, as clearly shown in Woodward's FIG. 2. As such, even if Woodward's supply chute 11 is characterized as a "plug prevention member" (as per the examiner), it is clear and indisputable that Woodward's supply chute 11 does not extend "at least partially into" to any rotating inlet throat or other rotating structure of Woodward's impeller. In this regard, the examiner's characterization of Woodward's supply chute 11 as "extending at least partially at" the impeller inlet

(Office Action, p. 2, para. 2, emphasis added) is not relevant, if and to the extent that this comment is capable of being understood at all. The examiner's other remarks contending that Woodward's supply chute 11 extends "at least partially into" the impeller inlet (e.g., Office Action, p. 5, para. 4, emphasis added) are simply and clearly wrong.

In Woodward, each potato traveling along the supply chute 11 must completely exit the downstream end of the chute 11 before that potato can enter the spinning impeller and be displaced by the impeller for centrifugal force-driven displacement into engagement with the cutting knives. Conversely stated, in Woodward, a potato cannot be movably displaced by the impeller unless and until such potato has completely exited the downstream end of the supply chute 11. Accordingly, if a potato in Woodward becomes stuck or trapped on the impeller by centrifugal force, as by hanging up against the radially inboard edge of one of Woodward's impeller blades 43, that potato is already out-of-contact with the supply chute 11 whereby Woodward's supply chute 11 does not and cannot strike that hung-up potato to dislodge it from the stuck position.

Woodward's machine will be similarly deficient even if re-oriented and/or re-configured as suggested by the examiner in view of the cited Galland reference. That is, re-orienting Woodward's machine to define an "upwardly open" impeller inlet throat will enable the supply chute to strike and dislodge a potato that has become stuck or trapped by centrifugal force against a rotating surface of the impeller. Instead, in such re-oriented machine, each potato must completely exit the downstream end of the supply chute 11, before it can be swept rotationally by the impeller into engagement with the cutting knives. In the re-oriented machine as posed by the examiner, this means that each potato must fall below and clear the lowermost end of the re-oriented supply chute 11, before it can be carried rotationally by the impeller. If such potato thereafter becomes stuck or trapped against an impeller throat surface by centrifugal action, that potato is already below the supply chute 11 and thus is not in a position to strike or impact that supply chute for dislodging. Indeed, for this function to occur in the examiner's re-oriented Woodward machine, the dropped potato would have to move backwards in a vertically upward direction, against

the force of gravity, before any subsequent contact with the supply chute 11 would be possible. Applicants respectfully suggest that such vertically upward back-travel of a centrifugal-stuck potato, against the laws of gravity, will not occur.

Thus, even if Woodward's machine is re-oriented to the "upwardly open" impeller throat configuration as shown in Galland, the supply chute 11 does not and cannot constitute a "plug prevention" device as recited in applicants' claims, namely, for "impact engagement" by a food product such as a potato which has become stuck or trapped by centrifugal action against a rotating impeller surface. Inherently and necessarily, each potato in Woodward must completely exit the supply chute 11 before it can move rotationally with the impeller, and thus before there is any risk of the potato becoming stuck or trapped by centrifugal action against a rotating impeller surface. If the potato has already completely exited the supply chute 11 before sticking by centrifugal force, how then can the stuck potato move backwards to strike such supply chute for impact-caused dislodging?

Clearly, applicants' claims 1-20 distinguish from and are patentable over any teaching found in the Woodward and/or Galland references.

Applicants further note the examiner's continued citation of Burch, U.S. Patent 5,385,074 and Bogie, U.S. Patent 2,631,785 as secondary references to support the rejection of applicants' dependent claims 2-6 and 13-17 for alleged obviousness. Applicants distinguished these two references in the prior Response (filed October 12, 2004), but the examiner has apparently chosen to repeat these rejections without bothering to consider or address applicants' prior distinguishing remarks.

As understood, the examiner has cited the Burch reference for allegedly teaching "a plug prevention member which is extended into an upwardly open inlet throat of a rotary impeller" (Office Action, p. 4, para. 3). However, as noted in applicants' prior remarks, Burch teaches nothing of the sort. To the contrary, Burch shows multiple threaded rods constituting an auger for pushing products into engagement with a helical knife assembly. Applicants repeat: Burch **DOES NOT** have a rotating impeller, and **NONE** of the threaded rods is designed for or

capable of performing any “plug prevention” function. Characterizing any portion of Burch’s device as a “plug prevention” device is simply wrong – as would be plainly apparent to any person having even limited skill in the relevant art. This was pointed out in applicants’ prior Response, and the examiner has made no attempt to explain or justify the on-going erroneous interpretation of the Burch reference.

Similarly, the examiner’s characterization of the Bogie reference is equally wrong. Astoundingly, the examiner contends that Bogie teaches a machine for guiding “food products” (Office Action, p. 4, para. 3). But the Bogie reference is in fact directed to a **ROCK CRUSHER**, for crushing “hard and friable materials such as ore, rock, coal and the like (col. 1, lines 3-4). **Rocks are NOT food items.** The examiner’s apparent contention that mechanisms used to guide rocks for crushing are somehow pertinent to “plug prevention” devices in potato slicing machines, is absurd on its face.

In addition, the “rod 15” in Bogie upon which the examiner relies is clearly NOT “capable of guiding food items without crushing them”, as argued by the examiner (Office Action, p. 4, para. 3). Quite the contrary, Bogie’s “rod 15” is a crushing jaw, and functions to guide ROCKS against another crushing jaw 16 – for the express purpose of crushing those rocks (as clearly shown in FIG. 1) into smaller pieces. Applicant is at a complete loss to understand how the “rod 15” described by the reference as a crushing “jaw” for crushing rocks can be misinterpreted by the examiner as a structure capable of guiding food items such as potatoes without crushing them.

Moreover, applicant does not understand how the examiner can continue to rely upon the Bogie reference, following the remarks provided in applicants’ prior Response. Yet, without explanation or justification, the examiner has chosen to do so.

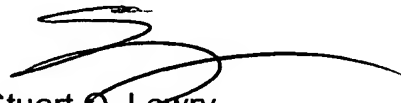
Applicants therefore request withdrawal of all rejections based on the Burch and/or Bogie references, for the reasons stated above. If such rejections are not withdrawn, applicants intend to pursue the matter on appeal.

**Conclusion**

In conclusion, in view of the foregoing remarks, applicants respectfully resubmit claims 1-20 for reconsideration and allowance. A Notice of Allowance is believed to be in order, and is therefore respectfully requested.

Respectfully submitted,

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